

**Notice of Allowability**

Application No.

09/831,583

Examiner

Mark Ruthkosky

Applicant(s)

SCHMIDT ET AL.

Art Unit

1745

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/12/2004.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

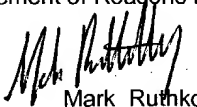
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

 4/1/04  
Mark Ruthkosky  
Primary Patent Examiner  
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## **DETAILED ACTION**

### ***Drawings***

In the previous office action the examiner noted that the drawings filed on 6/21/2001 were approved. The applicant acknowledged this statement, however, no drawing have been filed with the application. If the application is incomplete with the drawings missing, the applicant should file a copy of the drawings. Neither the priority document nor the bibliographic data sheet shows drawings filed with the application.

### ***Claim Rejections - 35 USC § 102***

The rejection of claims 1, 3, 4, 5, 8, 9, 11, 12, 13, and 19 under 35 U.S.C. 102(b) as being anticipated by Ohmura et al. (WO 95/11527) AND under 35 U.S.C. 102(e) as being anticipated by Ohmura et al. (US 5,993,994) has been overcome by the applicants amendment.

### ***Claim Rejections - 35 USC § 103***

The rejection of claims 1-3, 17 and 19 under 35 U.S.C. 103(a) as being unpatentable over Okayama et al. (10-012,199) is withdrawn.

### ***Allowable Subject Matter***

Claims 1-20 are allowed.

The following is an examiner's statement of reasons for allowance:

The instant claims are to a battery sheath made of formed cold-rolled sheet metal comprising at least on an inside surface thereof with an electroplated coating selected from a group of metals consisting of Ni, Co, Fe, Sn, In, Pd, Bi and alloys thereof wherein electrically conductive particles comprising at least one material not selected from the group of metals are embedded in dispersed form in the electroplated coating.

The most pertinent prior art has been presented. Ohmura et al. teaches a cold-rolled metal sheet comprising, at least on an inside surface thereof, an electroplated coating selected from a group of metals consisting of Ni, Co, Fe, Sn, In, Pd, Bi and alloys thereof (see example 1.) Nickel-tin layers are also noted. The nickel plating is about 2  $\mu\text{m}$ . The electroplating method includes agitation of the materials. Stabilizers and brighteners are noted. The reference does not teach additional conductive particles embedded in dispersed form in the electroplated coating.

In addition, Okayama et al. (10-012,199) teaches a cold-rolled metal battery sheath including a nickel-tin alloy plated on the inner surface of the metal can. A conductive film comprising mainly graphite is formed on the nickel-tin alloy. The thickness of the plated film is about 0.5 mm (paragraph. 3.) The reference does not teach the graphite layer to be embedded into the surface of the nickel-tin alloy.

With regard to claim 6, the prior art doesn't teach a process where carbon is suspended in an electroplating bath. With regard to claim 10, the prior art doesn't teach a process where the forced flow velocity of the electrolyte is 6-10 m/s. With regard to claim 14, the prior art doesn't teach a process as claimed including carbon. With regard to claim 18, the prior art doesn't teach a process as claimed including 15% elemental carbon. With regard to claim 18, the prior art doesn't teach a process as claimed including the specified materials.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Examiner Correspondence***

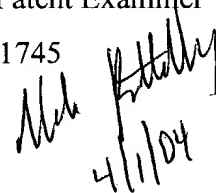
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Ruthkosky whose telephone number is 571-272-1291. The examiner can normally be reached on FLEX schedule (generally, Monday-Thursday from 9:00-6:30.) If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark Ruthkosky

Primary Patent Examiner

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4/1/04